

Claims

- [c1] What is claimed is:
1. A method for providing a reliable connectionless protocol to transfer short pieces of information, the method comprising the steps of:
Using a data transfer process using a layers stack model consisting of multiple layers; and
Adding an intermediate transport layer with the following fields, type of packet and packet ID.
 - [c2] 2. The method in claim 1 in which said type of packet field is a single byte.
 - [c3] 3. The method in claim 1 in which said packet ID is a single byte.
 - [c4] 4. The method in claim 1 in which said type of data field has three possible meanings:
that it is a packet that contains data that must be acknowledged;
that it is a packet that contains data that does not need to be acknowledged;. and
that it is a packet that is an acknowledge response.
 - [c5] 5. The method in claim 1 in which said Packet ID has three possible meanings:
it is a number chosen by the packet sending means if it is in a packet that contains data that must be acknowledged;
the field is ignored if it is in a packet that contains data that does not need to be acknowledged;. and
it is the packet ID of the data packet being acknowledged if it is in a packet that is an acknowledge response.
 - [c6] 6. The method in claim 1 in which includes the following steps comprising:
Sending a packet with the acknowledgement request;
Turning on a timer means;
Waiting for an acknowledgement for the sent packet;
Resending the packet if timer means exceed set response time without receiving an acknowledgement;
Repeating the previous two steps until acknowledgement is received or a set

number of retries is reached; and

Reporting the results.

[c7] 7. The method in claim 1 in which includes the following steps comprising:
Receiving a packet with an acknowledgement request;
Checking to see if it is a duplicate packet by comparing the packet number with the previously received packet;
Generating an acknowledgement; and
Processing the data.

[c8] 8. The method in claim 1 in which includes processing with an 8-bit microprocessor.

[c9] 9. The method in claim 1 in which includes the following steps comprising using an UDP transport protocol.

[c10] 10. A computer program wherein the base component has interfaces and the program code for:
Using a data transfer process using a layers stack model consisting of multiple layers; and
Adding an an intermediate transport layer with the following fields, type of packet and packet ID.

[c11] 11. The computer program in claim 10 in which said type of packet field is a single byte.

[c12] 12. The computer program in claim 10 in which said packet ID is a single byte.

[c13] 13. The computer program in claim 10 in which said type of data field has three possible meanings:
that it is a packet that contains data that must be acknowledged;
that it is a packet that contains data that does not need to be acknowledged;.
and
that it is a packet that is an acknowledge.

[c14] 14. The computer program in claim 10 in which said Packet ID has three possible meanings:

it is a number chosen by the packet sending means if it is in a packet that contains data that must be acknowledged;
the field is ignored if it is in a packet that contains data that does not need to be acknowledged;. and
it is the packet ID of the data packet being acknowledged if it is in a packet that is an acknowledge response.

[c15]

15. The computer program in claim 10 further comprising:
Computer code for sending a packet with the acknowledgement request;
Computer code for turning on a timer means;
Computer code for waiting for acknowledgement for the sent packet;
Computer code for resending the packet if timer means exceed set response time before acknowledgement is received;
Computer code for repeating the previous two steps until acknowledgement is received or a set number of retries is reached; and
Computer code for reporting the results.

[c16]

16. The computer program in claim 10 further comprising:
Computer code for receiving a packet with an acknowledgement request;
Computer code for checking to see if it is a duplicate packet by comparing the packet number with the previously received packet;
Computer code for generating an acknowledgement; and
Computer code for processing the data.

[c17]

17. The computer program in claim 10 further comprising using an UDP transport protocol.